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Public Transportation and New Mobility

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Uber

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Agenda

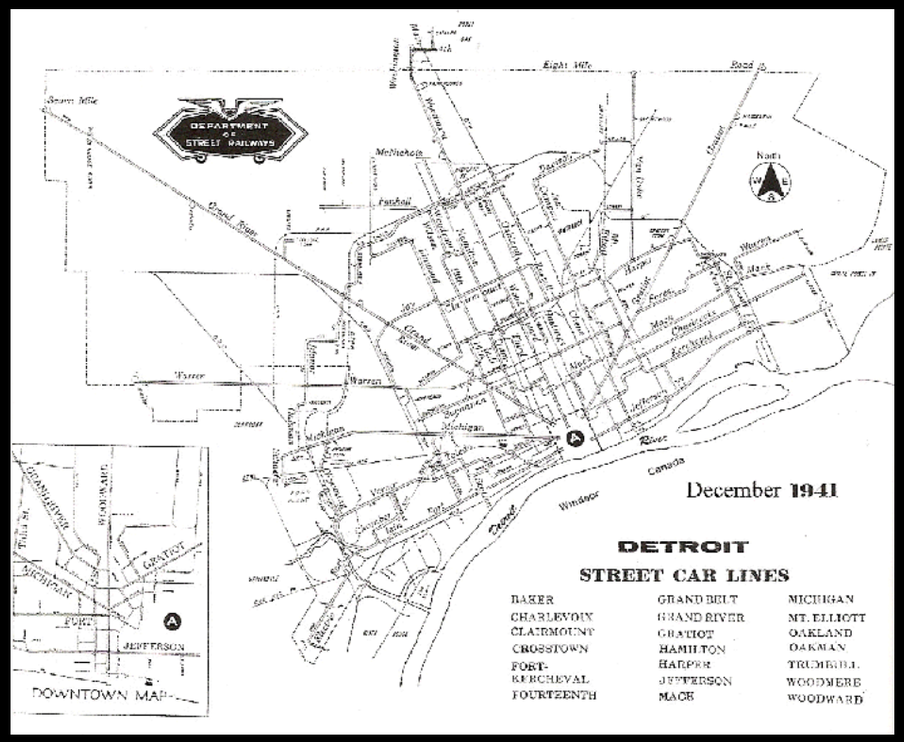
- Traditional fixed-route public transportation (US focused)
- The purpose of public transportation today
- Defining and measuring success
- The role of private mobility partners

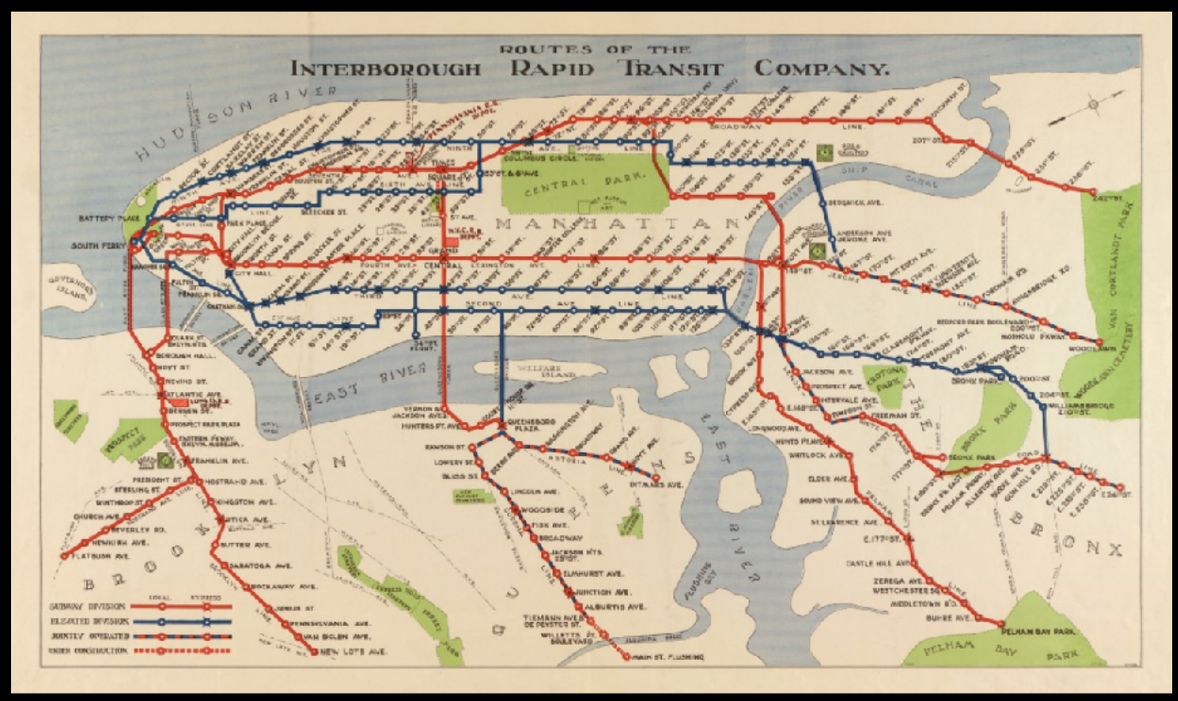
Traditional Fixed-Route Public Transportation

Pre-War History

- Cities developed around transit, creating positive cycle
- Pre-war: usually fastest and cheapest way to travel
- Little competition from the private car

Cities Built Around Transit

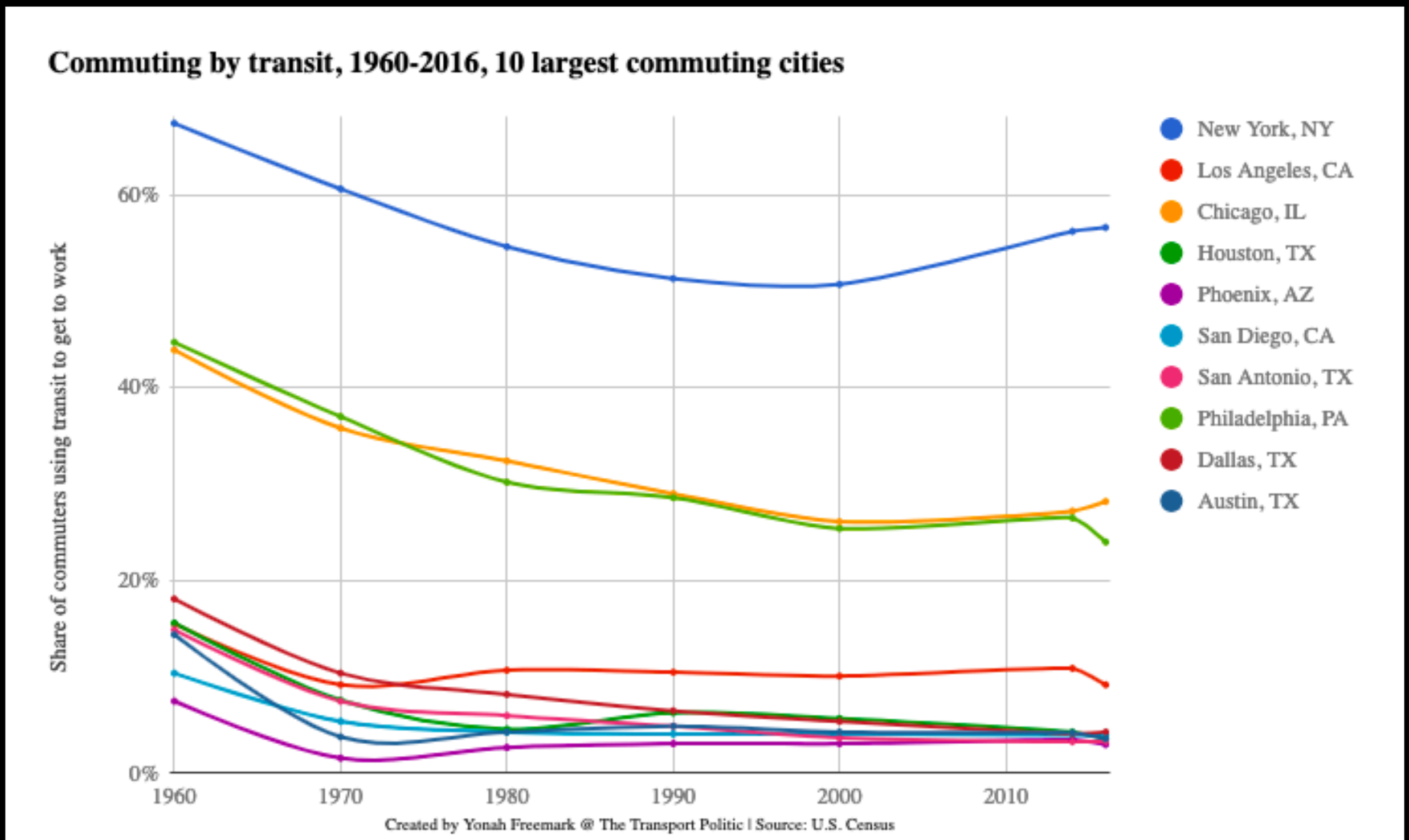




Post War to Today

- Massive subsidies lead to shift towards private automobiles
- Highway construction, parking, auto-oriented development
- Today: transit is no longer the fastest or even cheapest method to travel (outside of parts of major transit cities)
- Today: Due to land use and competition, transit share falls, goes public

Post War Trends



What is the Purpose of Public Transportation?

Purpose of Public Transportation

- Sell bus and train rides?
- Reduce congestion?

Purpose of Public Transportation

Connect people to social and economic opportunities at low cost to user, accessible to all, with minimal environmental impact, and minimal impact to walkable urban form

Tools of the Trade

What Does Transit Do Well?

- Move large numbers of people through small spaces
- Enables density and walkability of cities
- Low impact to environment
- Low cost to users

What Does Transit Not Do Well?

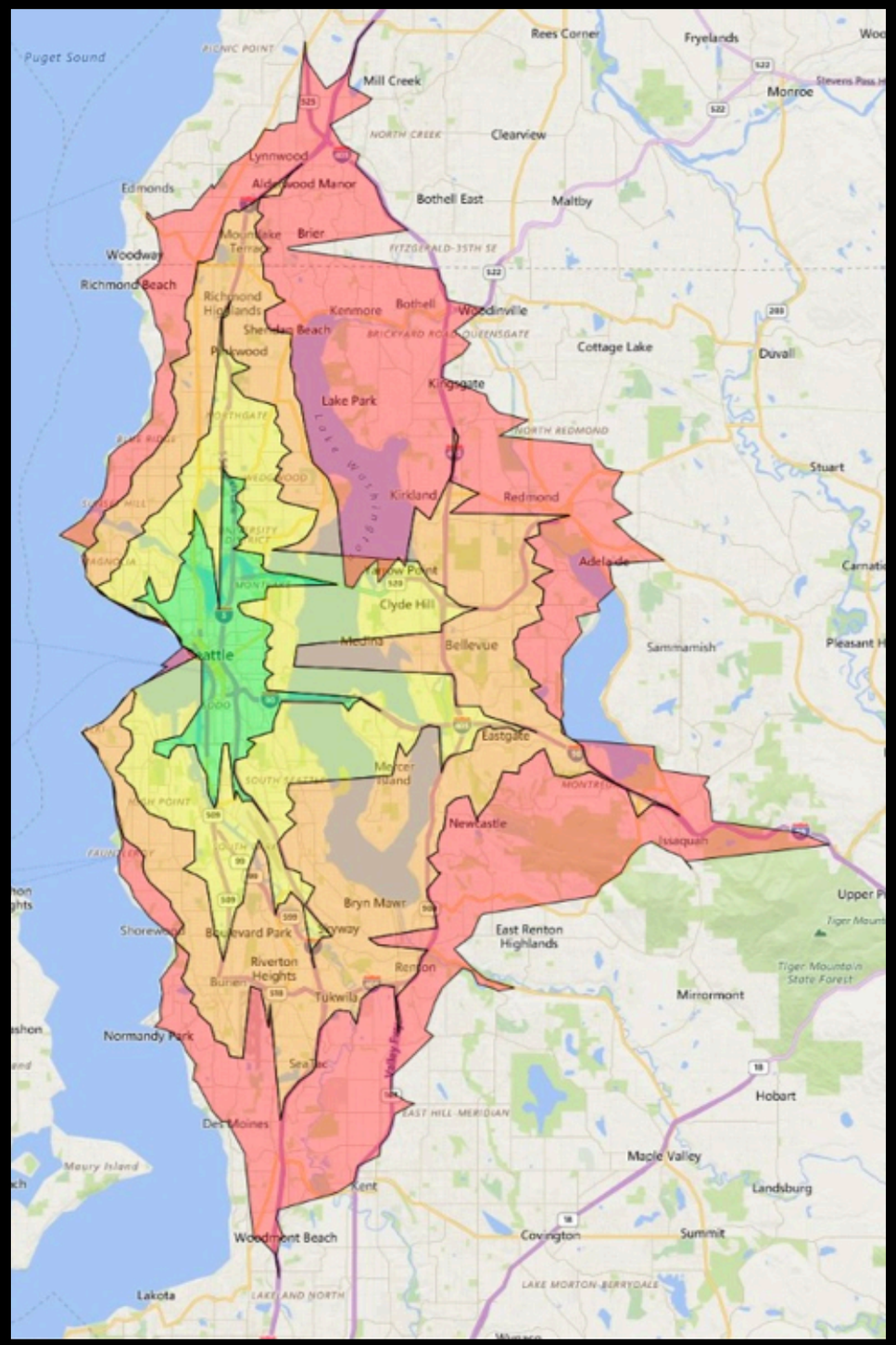
- Connecting many to many (suburbs, paratransit)
- Off peak (fewer riders, cost per passenger rises, frequencies drop)
- Lower density areas
- Gentrification pushing transit’s best customers out and away from where transit succeeds

Defining and Measuring Success

Defining and Measuring Success

Connect people to social and economic opportunities at low cost to user, accessible to all, with minimal environmental impact and minimal impact to walkable urban form

Accessibility Score



- How do we put more green and yellow on this map, while minimizing…
- Cost to user, cost to system
- Emissions
- Space
- Inequitable distribution of benefits

Can New Mobility Play a Role?

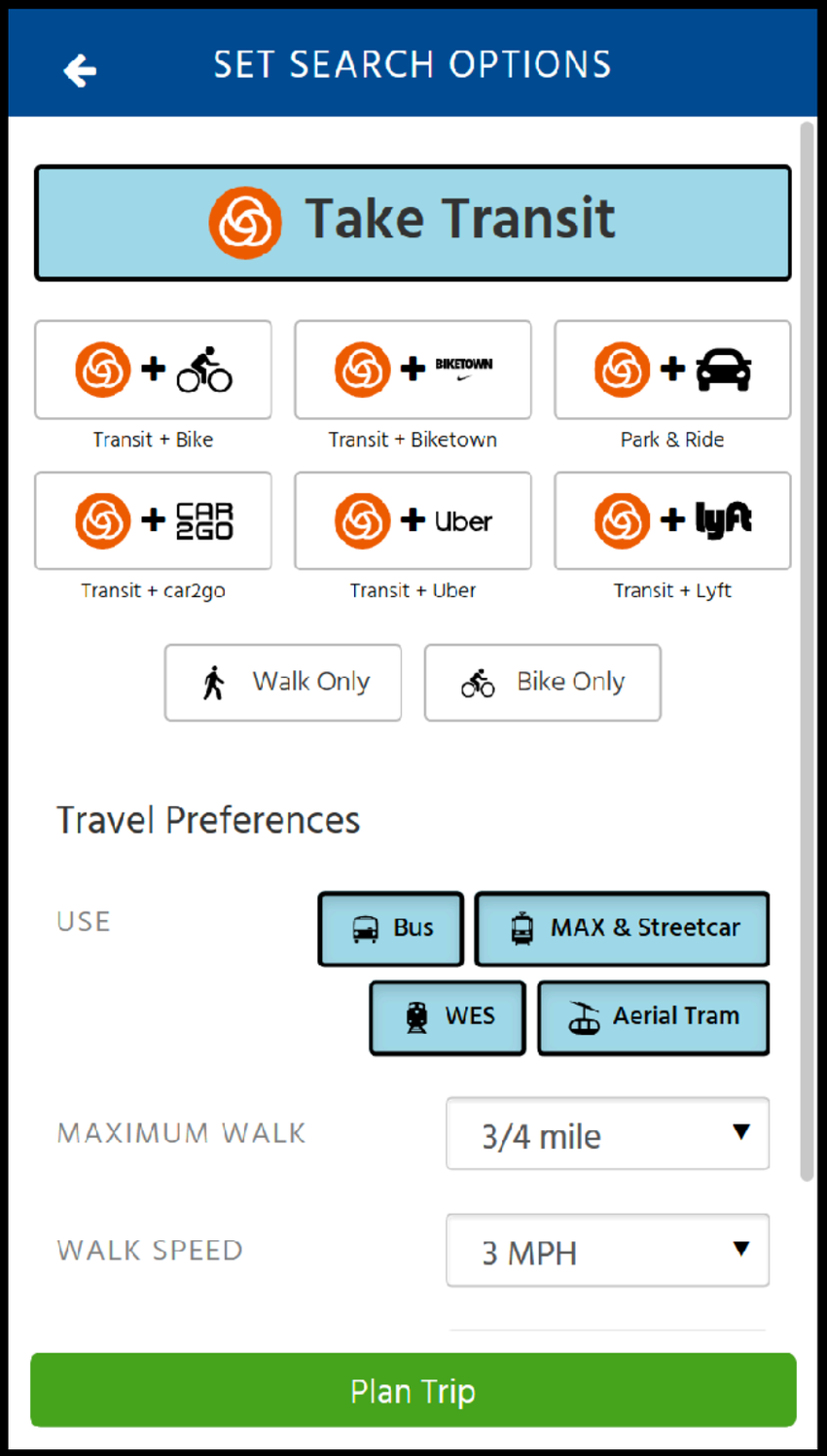
Start with Redefining Transit

Decide how best to allocate transportation subsidies to **achieve goals** (connect people to social and economic opportunities) while **minimizing negative impacts** (low cost to user, accessible to all, minimal environmental impact, and minimal impact to walkable urban form)

Start with Redefining Transit

- Mass transit will still come up as the best option for many scenarios
- However, there is a role for new mobility to complement transit
  - Transit - low to high cost, high capacity, low environmental impact, low space impact
  - Uber - potentially low cost, on-demand
  - JUMP bikes - very low cost, electric, minimal space impact
  - Scooters - very low cost, electric, minimal space impact

Extending Transit's Reach



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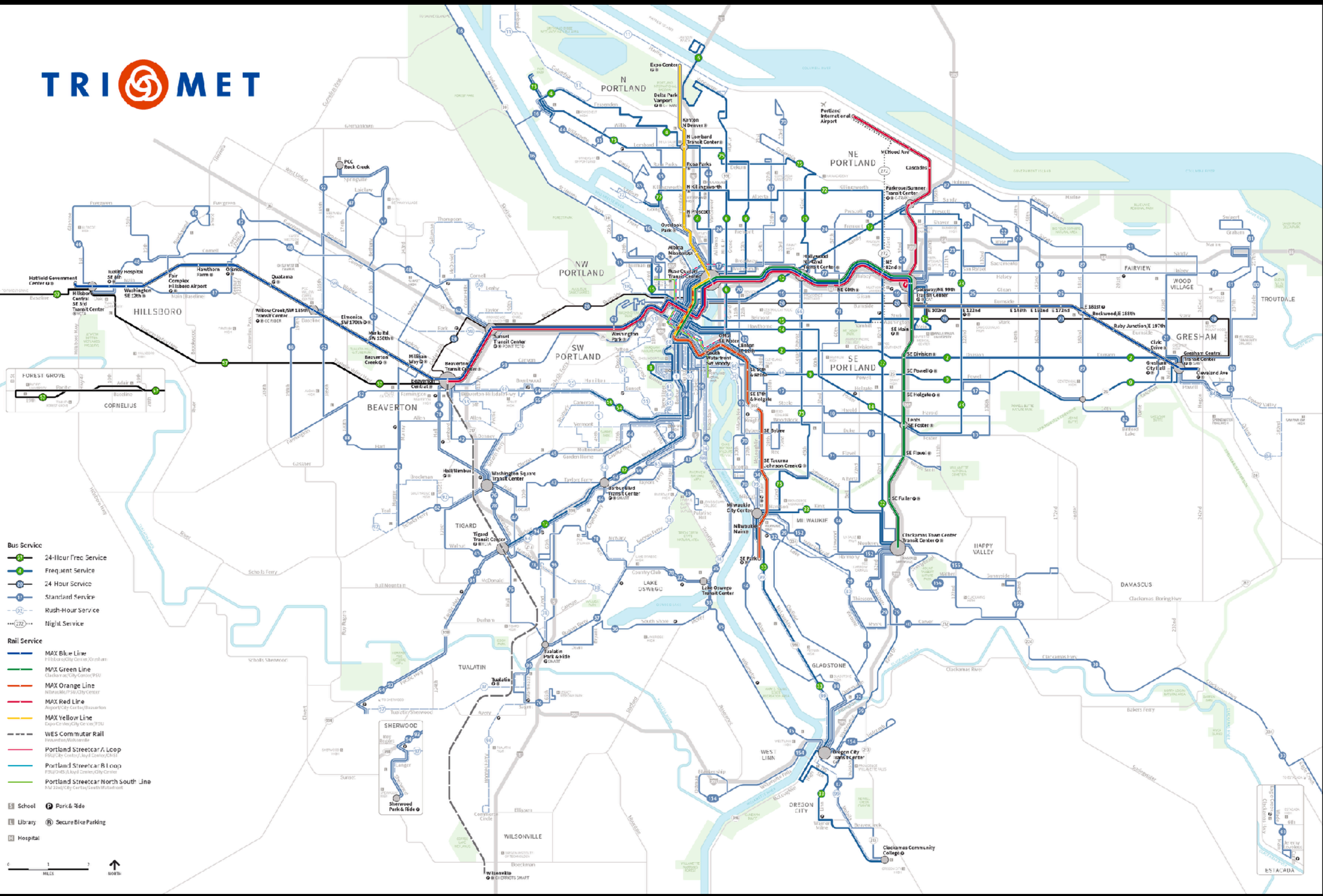
N PORTLAND
NW PORTLAND
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HILLSBORO
BEAVERTON
TIGARD
TUALATIN
SHERWOOD
WILSONVILLE
LAKE OSWEGO
MILWAUKIE
GLADSTONE
WEST LINN
OREGON CITY
HAPPY VALLEY
DAMASCUS
FAIRVIEW
WOOD VILLAGE
TROUTDALE
GRESHAM
FOREST GROVE
CORNELIUS
ESTACADA
Expo Center
Delta Park/ Vanport
Kenton/ N Denver
N Lombard Transit Center
Rosa Parks
N Killingsworth
N Prescott
Overlook Park
Albina Mississippi
Rose Quarter Transit Center
Portland International Airport
MLK/Killingsworth
Cascades
Parkrose/Sumner Transit Center
Hollywood/ NE 42nd Transit Center
NE 82nd
NE 60th
Gateway/NE 99th Transit Center
E 102nd
E 122nd
E 148th
E 162nd
E 172nd
E 181st
Rockwood/E 188th
Ruby Junction/E 197th
Civic Drive
Gresham Central Transit Center
Cleveland Ave
Gresham City Hall
SE Main
SE Division
SE Powell
SE Holgate
SE Foster
SE Flavel
SE 17th & Holgate
SE Bybee
SE Tacoma/Johnson Creek
SE Fuller
Milwaukie City Center
Milwaukie Naito
SE Park
Clackamas Town Center Transit Center
Oregon City Transit Center
Clackamas Community College
Lake Oswego Transit Center
Tualatin Park & Ride
Tigard Transit Center
Washington Square Transit Center
Barbur Blvd Transit Center
Hall/Nimbus
Tualatin
Sherwood Park & Ride
Wilsonville
Sunset Transit Center
Beaverton Transit Center
Beaverton Central
Beaverton Creek
Millikan Way
Elmonica/SW 170th
Merlo Rd/SW 158th
Willow Creek/SW 185th Transit Center
Hillsboro Central/SE 3rd Transit Center
Hatfield Government Center
Tuality Hospital/SE 8th
Washington/SE 12th
Fair Complex/Hillsboro Airport
Hawthorn Farm
Orenco
Quatama
PCC Rock Creek
Washington Park
Marquam Hill
South Waterfront/SW Moody
OHSU/SE Water Ave/Lowell St
Willamette Falls
Bridgeport
Durham
Ellingsen
Boeckman
Garden Home
Multnomah
Germantown
Bull Mountain
Scholls Ferry
Tualatin-Sherwood
Bus Service
24-Hour Frec Service
Frequent Service
24 Hour Service
Standard Service
Rush-Hour Service
Night Service
Rail Service
MAX Blue Line
Hillsboro/City Center/Gresham
MAX Green Line
Clackamas/City Center/PSU
MAX Orange Line
Milwaukie/PSU/City Center
MAX Red Line
Airport/City Center/Beaverton
MAX Yellow Line
Expo Center/City Center/PSU
WES Commuter Rail
Beaverton/Milwaukie
Portland Streetcar A Loop
PSU/City Center/Lloyd Center/OMSF
Portland Streetcar B Loop
PSU/OMSF/Lloyd Center/City Center
Portland Streetcar North South Line
Mar 22nd/City Center/South Waterfront
School
Park & Ride
Library
Secure Bike Parking
Hospital
MILES
NORTH

Extending Transit's Reach

- Innisfil, Ontario - 36,000 people north of Toronto
- On-demand transit coverage through Uber
- $150,000 over 10 months to subsidize 26,700 trips
- Would have been $439,000 capital + $541,000 operations costs for fixed-route

Extending Transit's Reach

- On-demand Paratransit
- Journey planning
- Mobile ticketing
- Mobility-as-a-Service

Thank you

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